

Department of Biochemistry and Microbiology
Cook College,
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Rocky Hill,
NJ 08553 H:609-924-6612

1956 B.Sc., University of London, UK
1959 Ph.D., University of Exeter, UK; Microbiology

1959-61	P.D., National Research Council, Halifax, Canada Microbiology of Pulp and Paper
1961-62	Research Associate, U.S. Army Laboratories With E.T.Reese: cellulase studies
1962-64	Research Associate, University of Wisconsin Studies of polysaccharases
1964-70	National Research Council, Saskatoon, Sask. Canada Studies of cellulase and other polysaccharases
1970-1983	Associate Professor, Dept. Microbiology and Biochemistry, Cook College, Rutgers University
1983-1988	Full Professor
1988-	Professor II Studies cellulase; mycorrhizae and nitrogen fixation (Frankia sp)

1973 - General Microbiology 01:119:390. Lecture & Lab.
Course
1970 - Microbial Ecology 01:119:495. Laboratory
1990 - Microbial Technology 11:126:405 with J.D. Macmillan
50%
General - Research in Biology 01:119:407
Research Problems in Biochemistry 115:494
Honors in Biology 119:407 Independent study 119: 202 and 308

1970 - Microbial Ecology 16:680:572. (Laboratory section)
1970 - Special Topics Course 11:680.685, 686
1981 - 1993 Microbial Biochemistry 16:680:520 (team
taught) 1987 - Industrial Microbiology 16:680:524
1988 - Large Scale Fermentation 16:680:525 (guest lectures)
Research in Microbiology 16:680:701 (25841)

RESEARCH: Industrial Fermentations (Cellulases):
Alcohol cf. gasohol (*Zymomonas mobilis*).
Ecology (nitrogen fixation - Frankia,
endo-mycorrhizae of marram grass).

Society for Industrial Microbiology "The Waksman Outstanding Teaching Award" 1989
Merck Microbiology Award, 1989

Distinguished Service Award (cf. cellulase), University of Arkansas, 1985
 Novo Center of Excellence Award, Copenhagen, 1981
 President, Theobald Smith Society, 1985-86
 (NJ Section of American Society of Microbiology)
 American Society for Microbiology Foundation Lecturer, 1983
 Gordon Conference Chairperson (Appl. Environ. Microbiol. 1991)
 Board of Directors, Society for Industrial Microbiology
 American Society for Microbiology, Chair Section O, 1993-4.

SABBATICAL STUDY:

1986 - Pasteur Institute, Paris, France
 Cloning of Xyl Z (xylanase of Clostridium thermocellum)
 1987 - International Atomic Energy Agency, Vienna, Austria
 Development of a grant proposal "The Utilization of Biomass for Application in Developing Countries" (for \$3 million).
 Editor: International Symposium on Biomass Utilization.
 1992 - Microbiology & Crop Protection Department,
 Horticulture Research International,
 Littlehampton, UK (4 months)
 Cellulases of Trichoderma and Thermophilic Actinomycetes

RECENT PROFESSIONAL ACTIVITIES (1992 -):

N.J. Academy of Sciences 1980. Local Symposium - Chair
 Theobald Smith Society (NJ Amer. Soc. Microbiol.) Board member
 1979; Meetings Chair, 1979, 1981-1984; President, 1985-1986
 Latin American Visiting Professorship Committee:ASM 1980-1986
 Society for Industrial Microbiology; 1980 Symposium Chair;
 1977-1980 Program Manager (Microbiology) Paint Research Inst.
 USA-China 1976 (NSF Industrial Fermentations), Boston
 USA-Korea (NSF Biotechnology Team) Seoul, Korea. 1977
 Portuguese/USDA Consultant 1980
 Portugal - NATO Advanced Study Inst. "Biomass Utilization,"
 1982 USA - XIII Internat. Microbiol. Congress, Boston, 1982
 (Convenor)
 1982 USDA Biomass Mission to Japan (November - 3 weeks)
 Program Organizer - Biotech 83 (London), Biotech 84
 (Washington) Chair.- Appl. Microbiol. Sectn.- 7th Symp.
 Biotechnology/Fuels and Chemicals, Gatlinburg, WV,
 1984
 Japan Biotechnology Conference (NSF), US rep., Honolulu, 1984
 Biomass Consultant, International Atomic Energy Agency,
 Split, Yugoslavia, 1986
 UN Consultant Biotechnology, Bucharest, Romania, 1987
 UN Consultant in Biotechnology, Sao Paulo, Brazil, 1988
 UN Consultant in Biotechnology, Sfax, Tunisia, 1988-93
 Gordon Conference on Applied & Environmental Microbiology
 Speaker (1981, 1987), Convenor (1989), Chairman (1991).
 50th Anniversary of the Discovery of Actinomycin - the first
 actinomycete antibiotic, Chairman, Cook College,
 Rutgers University, April, 1991.
 Cook College Short Course in Recombinant DNA Laboratory
 Techniques - Director (1987-1990)
 U.S. Environmental Protection Agency Biotechnology Board 1990-
 Board of Directors, Society for Industrial Microbiology 1989

PUBLICATIONS: Research publications - over 100; Editor - two books; Patents - 2

Partial listing of publications since 1989:

El-Gogary, S., A. Leite, O. Crivellaro, D.E. Eveleigh and H. El-Dorry. 1989. Mechanism by which cellulose triggers cellobiohydrolase I gene expression in Trichoderma reesei. Proc. Natl. Acad. Sci. 86:6138-6141.

Eveleigh, D. E. 1989. Cellulose-degrading enzyme systems. In: "Enzyme Systems for Lignocellulose Degradation", (ed. M.P. Coughlan), pp.85-86. Commission of the European Communities.

Eveleigh, D.E. 1989. "A Perspective on the Development of Regulations for Release of Genetically Engineered Microbes", Chapter 26, in International Workshop on Biotechnology and Biodegradation, (eds. D. Kamley and A. Chakrabarty). Gulf Pub., Houston, TX.

Burden, D. and D. E. Eveleigh. 1989. Chapter "Yeasts - Diverse Substrates and Products"; in "Yeast Technology". D. & J.F.T.S. Spencer (eds.). pp.198-227. Springer Verlag, New York, NY.

Eveleigh, D.E. 1989. Biodegradation of Biomass - Mechanisms. In: 7th International Biodeterioration Symposium (eds. D.R. Houghton, R.N. Smith and H.O.W. Eggin. pp. 315-324. Elsevier Applied Science, London, U.K.

Yablonsky, M.D., K.O. Elliston and D. E. Eveleigh. 1989. The relationship between the endoglucanase of MbcelA of Microbispora bispora and the cellulases of Cellulomonas fimi in "Enzyme Systems for Lignocellulose Degradation", Coughlan, M.P. (ed.). pp. 73-83. Commission of the European Communities, Elsevier Applied Science, London.

Buchholz, S.E. and D. E. Eveleigh. 1990. Genetic modification of Zymomonas mobilis. Biotechnology Advances 8:547-581.

El Gogary, S., Adilson Leite, Omar Crivellaro, Hamza El Dorry, and Douglas E. Eveleigh. 1990. Trichoderma reesei Cellulase - From Mutants to Induction. pp.200-211. TRICEL 89 - An International Symposium on Trichoderma Cellulases, Vienna, Austria. Kubicek, C. P., H. Esterbauer, D.E. Eveleigh, & W. Steiner, (eds.). Royal Chemical Society, London, UK. Eveleigh, D. E. 1990. Dedication of the Tricel 89 Symposium. In:TRICEL 89 - An International Symposium on Trichoderma Cellulases. eds. Kubicek, C. P., H. Esterbauer, D.E. Eveleigh, & W. Steiner. Vienna, Austria.

Hunter, J.C. and D.E. Eveleigh. 1990. Actinomycetes. In: Soil Biology Guide. (D.L. Dindal, ed.), pp.33-47. John Wiley Publ. Co., New York, NY.

Lejeune, A., C. Colson and D. E. Eveleigh. 1990. Molecular cloning of cellulase genes into non-cellulolytic microorganisms. Chapter 24, pp.623-671 in "Biosynthesis and Degradation of Cellulose. eds. C.H. Haigler & P.J. Weimer. Marcel Dekker, New York, NY.

Riske, F.J., D.E. Eveleigh, and J.D. Macmillan. 1990. Double-antibody sandwich enzyme-linked immunosorbent assay for cellobiohydrolase I. Appl. Environmen. Microbiol. 56:3261-6265.

Elliston, K.O., M.D. Yablonsky and D. E. Eveleigh. 1991. Cellulase Insights through Recombinant DNA Approaches. pp.290-300. in Enzymes in Biomass Conversion. G.F. Leathem & M.E. Himmel (eds.). American Chemical Society Symposium 460, American Chemical Soc., Washington D.C.

Goyal, A., B. Ghosh & D. E. Eveleigh. 1991. Characteristics of Fungal Cellulases. Bioresource Technology 36:37-50.

O'Mullan, P., M. Szakacs-Dobozi & D.E. Eveleigh. 1991. Identification of saccharolytic enzymes of Zymomonas mobilis CP4. Biotechnol Lett. 13:137-142.

Goyal, A., and D. E. Eveleigh. 1992. Degradation of cellulose and the effects of metal ions on cellulases. In "Metal Ions in Biological Systems" Vol. 28: Degradation of Environmental Pollutants by Microorganisms and their metalloenzymes. H. & A. Siegel, (eds.). Marcel Dekker, New York, NY. pp. 399-414.

Hu, P., S. K. Kahrs, T. Chase, Jr. and D. E. Eveleigh. 1992. Cloning of a Microbispora bispora cellobiohydrolase gene in Escherichia coli. J. Indust. Microbiol. 10:103-110.

Wright, R., M.D. Yablonsky, A.P. Shalita, A.K. Goyal and D.E. Eveleigh. 1992. Cloning, Characterization, and Nucleotide Sequence of a Gene Encoding Microbispora bispora Bg1B, a Thermostable β -Glucosidase Expressed in Escherichia coli. Appl. and Environ. Microbiol. 58:3455-3465.

Hu, P., T. Chase, Jr. and D. E. Eveleigh. 1993. Cloning of a cellobiohydrolase gene in Streptomyces lividans. Appl. Microbiol. Biotechnol. 38:631-637.

Klein, D.A. and D.E. Eveleigh. 1994. Evolution of the Mucoraceous Fungi: An Approach by PCR-RFLP and Sequencing of Ribosomal Internal Transcribed Spacers. 94rd Annual American Society of Microbiologists Meeting, May 1994, Las Vegas, NV.

Goyal, A. and D.E. Eveleigh. 1996. Gene sequence and analysis of gluco-glucano hydrolase of Microbispora bispora. Gene: accepted for publication.